

AMSAT News Service Weekly Bulletins

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AMSAT NEWS SERVICE

ANS-345

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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SB SAT @ AMSAT \$ANS-345.01

Radio Club of America Names AMSAT's Tom Clark K3IO Fellow

AMSAT News Service Bulletin 345.01

>From AMSAT HQ SILVER SPRING, MD.

December 11, 2011

To All RADIO AMATEURS

BID: \$ANS-345.01

Radio Club of America Names AMSAT's Tom Clark K3IO Fellow

At its annual Awards Banquet held this year at the Texas Motor Speedway near Fort Worth November 19th, the Radio Club of America honored AMSAT's Tom Clark, K3IO, by elevating him to the rank of Fellow in that prestigious organization.

The Radio club of America is the oldest radio club in the World, dating back to 1909. Among its members have numbered such notables as Major Edwin H. Armstrong, the inventor of the superheterodyne circuit, the super-regenerative detector and the system of Frequency Modulation still used today for police, fire and most other two-way radio communication as well as broadcasting. Other Radio Club of America members included Fred M. Link, an early two-way radio equipment manufacturer, David Sarnoff of RCA and Senator Barry Goldwater, K7UGA.

Next year's Awards Banquet will revert back to its customary venue, the New York Athletic Club in New York City.

[ANS thanks Bill Tynan, W3X0, AMSAT Life Member No. 10 and Radio Club of America Fellow for the above information]

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SB SAT @ AMSAT \$ANS-345.02

This Week 50 Years Ago: OSCAR 1 Launched December 12, 1961

AMSAT News Service Bulletin 345.02

>From AMSAT HQ SILVER SPRING, MD.

December 11, 2011

To All RADIO AMATEURS

BID: \$ANS-345.02

This Week 50 Years Ago: OSCAR 1 Launched December 12, 1961

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

O S C A R N E W S L E T T E R

December 12, 1961

OSCAR SATELLITE IN ORBIT

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At 2041 GMT, 12 December 1961 the Oscar satellite was hurled into orbit by the Discoverer XXXVI launching vehicle from Vandenberg Air Force Base, California. The satellite immediately went into a North-South orbit and was picked up loud and clear by the hams at KC4USB (Marie Byrd Base) at the South Pole a few minutes after launch. The word was quickly relayed back to the Oscar Tracking Station, K6QEZ, by W4ABY. Acquisition was also obtained by hams at Kodiak, Alaska and by KH6UK in Hawaii on the first pass.

Oscar is on a frequency between 144.990 and 145.008 and has tremendous c.w. signal strength on a direct, overhead pass! Tracking reports have begun to flow into the Center. W1AW heard the first pass S9 over the East coast.

The following telegram was received by the Center from the RSGB:
OSCAR HEARD 0055 GMT X KEYING OK X STRENGTH NINE PLUS X DOPPLER
SEVEN KC X FURTHER DATA AIR HAIL X.

Orbit is being computed, but insufficient time has elapsed to permit predictions to be made of time Oscar will pass over your area. Listen to W1AW and the Voice of America for orbital predictions. Continuous 24-hour a day monitoring is essential until predictions are established. In fact, this monitoring is urged to check for unpredicted reception at times when the Oscar satellite is theoretically out of range! Our thanks to the Air Force and men of Vandenberg AFB who helped to make this historic milestone possible!

Actual launch was attended by W6SAI, K6LFH, W6MLZ and W0TSN. Full Oscar story in February QST and CQ and more details in our next

news letter!

LISTEN TO OSCAR! 'SEND ALL REPORTS TO PROJECT OSCAR, BOX ---,
SUNNYVALE, CALIFORNIA, U.S.A.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above
information]

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SB SAT @ AMSAT \$ANS-345.03
A0-27 Scheduler Data Update

AMSAT News Service Bulletin 345.03
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: \$ANS-345.03

A0-27 Scheduler Data Update

The A0-27 web site remains offline due to connectivity problems.
A0-27 Control Station, Mike Wyrick, NU3C provided the latest data
files for the Java-based A0-27 Satellite Scheduler website main-
tained by George Henry, KA3HSW.

George has uploaded them to the A0-27 Satellite Scheduler website
so that users of the Java scheduler program can update their files.
Simply download them to the same folder that the Scheduler resides
in. DO NOT use the "Update Data" option from within the program, as
it will try to connect to the A0-27 website, which is still down.

The Java A0-27 Satellite Scheduler website is:
<http://sites.google.com/site/ao27satellitescheduler/>

[ANS thanks George Henry, KA3HSW for the above information]

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SB SAT @ AMSAT \$ANS-345.04
IARU Coordination Request for Kagawa University Tethered Satellite

AMSAT News Service Bulletin 345.04
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: \$ANS-345.04

IARU Coordination Request for Kagawa University Tethered Satellite

The IARU Satellite Frequency Coordination pages hosted by AMSAT-UK
have posted information regarding a new tethered satellite named
STARS-II which will be built by students at Kagawa University in
Japan.

STARS-II consists of Mother Satellite (MS) and Daughter Satellite
(DS) connected by tether. The mission will include formation flight,
tether deployment, attitude control and photographing each other.

1. Mother Satellite deploys tether with Daughter Satellite at end;
2. Daughter Satellite robotically controls attitude of CCD camera;
3. Mother Satellite and Daughter Satellite communicate via Bluetooth.

Proposed frequencies are:

80mW CW beacon

Mother Satellite: 437.245 MHz

Daughter Satellite: 437.255 MHz

800mW AX25 1200bps FM telemetry downlink

Mother Satellite: 437.405MHz

Daughter Satellite: 437.425MHz

Telemetry formats have been published at:

http://stars1.eng.kagawa-u.ac.jp/english/STARS-II_telemetry_format.html

Plans include a launch to a 600-800km sun synchronous orbit in the 2011-2012 timeframe.

An English version of STARS-II web page can be found at:

<http://stars1.eng.kagawa-u.ac.jp/english/index.html>

The IARU Coordination request can be seen on AMSAT-UK web:

http://www.amsatuk.me.uk/iaru/formal_detail.php?serialnum=170

[ANS thanks Kagawa University and AMSAT-UK for the above information]

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SB SAT @ AMSAT \$ANS-345.05

ISS Sp-Ex Shadow Beacon Experiment Postponed to May-June 2012

AMSAT News Service Bulletin 345.05

>From AMSAT HQ SILVER SPRING, MD.

December 11, 2011

To All RADIO AMATEURS

BID: \$ANS-345.05

ISS Sp-Ex Shadow Beacon Experiment Postponed to May-June 2012

Word has been received from Russia that the ISS Shadow-Beacon Experiment announced in ANS-324 has been postponed until the May-June 2012 timeframe. This will give time for a new amateur transceiver to be delivered to the ISS by cargo vehicle and give the crew more time to prepare for the experiment. The SpEx website is: <http://knts.tsniimash.ru/Shadow/en/>

[ANS thanks TSNIIMASH for the above information]

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SB SAT @ AMSAT \$ANS-345.06

SKN On OSCAR 2012 In Memory Of W1JSM

AMSAT News Service Bulletin 345.06

>From AMSAT HQ SILVER SPRING, MD.

December 11, 2011

To All RADIO AMATEURS

BID: \$ANS-345.06

You are cordially invited to participate in Straight Key Night on OSCAR 2012, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of Don Brown, W1JSM, who

passed away in 2011, aged 90. Don was a longtime, enthusiastic VHF/UHF and satellite operator, and one of our most frequent Best Fist winners.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2012 (0000 to 2400 UTC), using a straight hand key.

There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS in early February.

[ANS thanks Ray Soifer, W2RS for the above information]

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SB SAT @ AMSAT \$ANS-345.07
Pacific Islands Activation on Satellites

AMSAT News Service Bulletin 345.07
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: \$ANS-345.07

Pacific Islands Activation on Satellites

The Ohio/Penn DX Bulletin No. 1039 released on December 5, 2011 says that two satellite operations are planned from islands in the Pacific Ocean:

JD1, OGASAWARA. Makoto, JI5RPT, will once again be active as JD1BLY from Chichijima Island (AS-031), Ogasawara, between December 24th and January 2nd, 2012. Activity will be on 80-6 meters, including the satellites, using CW, SSB and the Digital modes (NO 6m EME). QSL via his home callsign JI5RPT. His log search will be available on his Web site at: <http://www.ji5rpt.com/jd1>
He will also use Twitter to inform his real-time activities at: <http://twitter.com/jd1bly>

KH0, MARIANA ISLANDS. Operators Buchi, J03FRH and Masa, JE4SMQ will be active as KH0UY and KH0K, respectively, from Saipan, Northern Mariana Islands between January 7-10th, 2012. Activity will be on 80-6 meters, plus the satellites. QSL via their home callsigns, direct or by the Bureau.

[ANS thanks The Ohio/Penn DX Bulletin for the above information]

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SB SAT @ AMSAT \$ANS-345.08
ARISS UPDATE

AMSAT News Service Bulletin 345.08
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: \$ANS-345.08

1. Upcoming School Contact

Nuvviti School in Ivujivik Nunavik, Quebec, Canada succeeded with Amateur Radio on the International Space Station (ARISS) contact on Monday, December 5 at 18:10 UTC via station WH6PN in Hawaii. Students formed a space club and are learning about the ISS via videos, the internet and guest speakers. They are also learning about correct radio usage and protocol and are working on science-related projects that they will display in the gym. First Air and the Makivik Corporation are sponsors of the contact.

2. New Proposal Cycle for ARISS-US Contacts

NASA Teaching From Space (TFS) office recently announced a new proposal cycle for ARISS-US contacts. The deadline for submitting proposals is January 30, 2012 for contacts to be held in the July 15, 2012 - January 15, 2013 timeframe. TFS has received several inquiries and proposals are already coming in. An informational session will be held on Wednesday, December 7 at 12 PM CST (1800 UTC) to answer any questions concerning the proposal process. To attend the session or to have questions answered, contact TFS at JSC-TFS-ARISS@mail.nasa.gov or call 281-244-1919.

For more information, see the TFS Web site:

<http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ari ss.html>

Also see the ARRL article (includes dates for future information sessions):

<http://www.arrl.org/news/apply-now-to-host-a-real-time-conversation-with -crewmembers-onboard-the-iss>

3. AMSAT News Service Covers ARISS

On Sunday, December 4, AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-338) included a status on ARISSat-1.

"ARISSat-1/KEDR Orbit Losing 1.5 KM Per Day" may be found at:

<http://amsat.org/pipermail/ans/2011/000572.html>

4. Amateur Radio Newline Covers ARISS

On December 2, the Amateur Radio Newline Report 1790 posted a story about ARISSat re-entering Earth's atmosphere. The article, "Ham Radio in Space: ARISSat-1 Approaching Last Days On-Orbit," may be viewed at: <ftp://ftp.arnewline.org/quincy/News/news.txt>

[ANS thanks Carol, KB2LBI, for the above information]

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SB SAT @ AMSAT \$ANS-345.09

Delfi-n3Xt Satellite Includes Amateur Linear Transponder

AMSAT News Service Bulletin 345.09

>From AMSAT HQ SILVER SPRING, MD.

December 11, 2011

To ALL RADIO AMATEURS

BID: \$ANS-345.09

Delfi-n3Xt Satellite Includes Amateur Linear Transponder

Delft University of Technology in the Netherlands has announced their new 3U Cubesat mission, Delfi-Next mission, or Delfi-n3Xt, scheduled

for launch in September, 2012 on-board a Dnepr rocket. Delfi-n3Xt is the successor to the Defli-C3, D0-64 flight launched in 2008.

The good news for amateur radio operators is that Delfi-n3Xt includes a linear transponder service as a return favour since the radio amateur community allows Delfi to use their frequencies.

The Delft frequency coordination request on the IARU page says that the linear transponder uplink and downlink frequencies are the same as those used on the earlier D0-64 mission:

Uplink: 435.570 - 435.530 MHz

Downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP

Using the Delft RASCAL software amateur radio groundstations have been able to receive the telemetry downlink from D0-64 and automatically forward the data to a server at Delft University. This software is JAVA based and runs on multiple platforms. The software and installation instructions are available from Delft University at: <http://tinyurl.com/cg3qs8j> (delfispace.nl)

Scientific, Technological, and Engineering, goals of the Delfi-n3Xt mission include:

- + Hands-on education and training of students
- + On-orbit configurable, high-efficiency transceiver platform
- + Development on the nano-satellite spacecraft bus
- + Attitude control with an on-board micro-propulsion system
- + Onboard experiment on hydrogenated amorphous silicon solar cells from the micro-electronics institute DIMES from the TU Delft.
- + Experimental S-band transmitter 2401.500 MHz downlink
- + Single-Point-Of-Failure-free OnBoard Computer (OBC)
- + Robust Command and Data Handling System, with significant less Bit-Error-Rate (BER) and more failure tolerance than on Delfi-C3.

The Delfi web pages can be found at:
have a look at: <http://www.delfispace.nl/>

The IARU Satellite Frequency coordination page can be found at:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=138

[ANS thanks Jan PE0SAT, and the TU-Delft Delfi-n3Xt Team for the above information]

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SB SAT @ AMSAT \$ANS-345.10

Doug Loughmiller, W5BL Appointed AMSAT JOURNAL Editor

AMSAT News Service Bulletin 345.10

>From AMSAT HQ SILVER SPRING, MD.

December 11, 2011

To All RADIO AMATEURS

BID: \$ANS-345.10

AMSAT President Barry Baines, WD4ASW has announced the appointment of Doug Loughmiller, W5BL as the new editor of the AMSAT Journal effective 1 JAN 12. Doug takes the reins from Ed Long, WA4SWJ who has served as editor for over seven years. Barry noted, "Ed has done a masterful job of producing the Journal, creating a magazine that is well designed and well regarded within the amateur radio community. After such a long stint as editor, Ed has decided that it is time for new blood."

Doug, W5BL is returning to 'active duty' within AMSAT. A former President of AMSAT, Doug brings knowledge of AMSAT and its storied history coupled with a desire to help AMSAT now that he has time to support AMSAT once again. Doug is looking for articles for publication, so feel free to contact him with material for inclusion in the Journal. If you've been active on the satellites, represented AMSAT at hamfests or club meetings, or done some home brewing of satellite equipment, and would like to write an article of your experiences, Doug is anxious to hear from you.

[ANS Thanks WD4ASW, Barry, for the above information]

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SB SAT @ AMSAT \$ANS-345.11

Mark Hammond, N8MH Appointed AMSAT VP-Educational Outreach

AMSAT News Service Bulletin 345.11

>From AMSAT HQ SILVER SPRING, MD.

December 11, 2011

To All RADIO AMATEURS

BID: \$ANS-345.11

AMSAT President Barry Baines, WD4ASW has announced the appointment of Mark Hammond, N8MH as AMSAT Vice President-Educational Relations. Barry noted, "The subject of educational outreach was well discussed at the 2011 AMSAT Symposium, based upon the paper that I presented as well as other presentations that outlined some of the challenges that AMSAT has experienced in creating a structure for fulfilling our mission component regarding education. Mark has agreed to help AMSAT establish and coordinate an education initiative program and serve as AMSAT's senior point of contact with outside organizations regarding educational outreach."

Given the increasing importance of fulfilling education goals as justification for launch opportunities, this is an increasingly important subject for AMSAT. Mark is aptly suited for this position as he is a professor of biology and the Dean of the College of Arts and Sciences at Campbell University, Buies Creek, NC and is very familiar with the potential for using the amateur radio satellites as a teaching resource and understands the teacher perspective as well.

[ANS Thanks WD4ASW, Barry, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,

This week's ANS Editor,

Dee Interdonato, NB2F